

Application No.: 09/629,810

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AMENDMENTS TO THE CLAIMS**Listing of Claims**

1. (canceled)

1 2. (previously amended) The timing device according to claim 10,
2 wherein the at least one sensor unit for scanning the first group and the at least one
3 higher-order group of code markings consists of a single sensor-emitter-unit.

3 and 4 (canceled)

1 5. (currently amended) The timing device according to claim 10, wherein in
2 the sensor unit a two-channel evaluation of the optical signals is performed.

6. (canceled)

1 7. (currently amended) The timing device according to claim 10, wherein
2 ~~the at least one code track and the groups of code markings have predefined~~
3 ~~differences between their~~ three different optical density levels differ from each other
4 by predefined amounts of optical density.

1 8. (previously amended) The timing device according to claim 7, wherein

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2 the at least three different optical density levels correspond to at least three different
3 gray levels which can span a range between light-blocking and almost complete
4 transparency.

1 9. (currently amended) The timing device according to claim 8, wherein
2 the carrier of the timing device is made of a reflecting material and the at least three
3 different optical density levels are constituted by groups of code markings have
4 different degrees of reflectivity relative to the carrier and relative to each other.

1 10. (currently amended) A timing device comprising a carrier having a
2 first group of code markings and at least one higher-order group of code markings
3 disposed in at least one code track, said first and at least one higher-order group of
4 code markings being scanned by at least one sensor unit to produce signals, said at
5 least one sensor unit comprising a light source and a photo-transistor, wherein the
6 code markings of the at least one higher-order group overlap with are superimposed
7 on the code markings of the first group in the at least one code track, wherein the at
8 least one code track has a basic optical density level, wherein the code markings of
9 the first group are bars of equal width and equally spaced from one another, whereas
10 the code markings of the at least one higher-order group are distributed over the code
11 track with an arbitrary spacing and from segments on the timing device are formed by
12 step changes from a first optical density level to at least a second optical density level
13 of said bars, said step changes serving for controlling different functions, wherein the

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11 higher-order group are distributed over the code track with an arbitrary spacing and
12 ~~form segments on the timing device are formed by step changes from a first optical~~
13 ~~density level to at least a second optical density level of said bars, said step changes~~
14 ~~serving~~ for controlling different functions, and wherein the code markings of the at
15 least one higher-order group are used for at least one of the purposes of controlling a
16 start position, controlling an end position, calibrating the timing device, and
17 determining an absolute position of the timing device; said positioning device further
18 comprising a signal processing device that converts the sensor signal into a control
19 signal and is connected after the sensor unit, wherein ~~the basic, the first, and the at~~
20 ~~least second optical density levels are different the at least one code track, the first~~
21 ~~group of code markings and the at least one higher-order group of code markings~~
22 ~~have different optical density levels~~ in comparison to each other, so that there are at
23 least three different optical density levels with a detectable gradation of optical
24 density, and wherein the detectable gradation is used for generating control or
25 position signals.

1 13. (previously amended) The timing device according to claim 10,
2 wherein the light source is an LED.

14. (canceled)

1 15. (currently amended) The timing device according to claim 10,

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- 2 wherein in the sensor unit a multi-channel evaluation of the optical signals is
- 3 performed.

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